BEFORE THE

PUBLIC UTILITIES COMMISSION

OF RHODE ISLAND

CITY OF NEWPORT)	
UTILITIES DEPARTMENT,)	DOCKET NO. 3578
WATER DIVISION)	

DIRECT TESTIMONY

OF

THOMAS S. CATLIN

ON BEHALF OF THE

DIVISION OF PUBLIC UTILITIES AND CARRIERS

MARCH 2004

EXETER

ASSOCIATES, INC. 5565 Sterrett Place Suite 310 Columbia, Maryland 20904

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Direct Testimony of Thomas S. Catlin

1		<u>Introduction</u>
2	Q.	WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?
3	A.	My name is Thomas S. Catlin. I am a principal with Exeter Associates, Inc. Our offices
4		are located at 5565 Sterrett Place, Suite 310, Columbia, Maryland 21044. Exeter is a
5		firm of consulting economists specializing in issues pertaining to public utilities.
6	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.
7	A.	I hold a Master of Science Degree in Water Resources Engineering and Management
8		from Arizona State University (1976). Major areas of study for this degree included
9		pricing policy, economics, and management. I received my Bachelor of Science Degree
10		in Physics and Math from the State University of New York at Stony Brook in 1974. I
11		have also completed graduate courses in financial and management accounting.
12	Q.	WOULD YOU PLEASE DESCRIBE YOUR PROFESSIONAL
13		EXPERIENCE?
14	A.	From August 1976 until June 1977, I was employed by Arthur Beard Engineers in
15		Phoenix, Arizona, where, among other responsibilities, I conducted economic feasibility,
16		financial and implementation analyses in conjunction with utility construction projects. I
17		also served as project engineer for two utility valuation studies.

From June 1977 until September 1981, I was employed by Camp Dresser &
McKee, Inc. Prior to transferring to the Management Consulting Division of CDM in
April 1978, I was involved in both project administration and design. My project
administration responsibilities included budget preparation and labor and cost monitoring
and forecasting. As a member of CDM's Management Consulting Division, I performed
cost of service, rate, and financial studies on approximately 15 municipal and private
water, wastewater and storm drainage utilities. These projects included: determining
total costs of service; developing capital asset and depreciation bases; preparing cost
allocation studies; evaluating alternative rate structures and designing rates; preparing bill
analyses; developing cost and revenue projections; and preparing rate filings and expert
testimony.

In September 1981, I accepted a position as a utility rates analyst with Exeter Associates, Inc. I became a principal and vice-president of the firm in 1984. Since joining Exeter, I have continued to be involved in the analysis of the operations of public utilities, with particular emphasis on utility rate regulation. I have been extensively involved in the review and analysis of utility rate filings, as well as other types of proceedings before state and federal regulatory authorities. My work in utility rate filings has focused on revenue requirements issues, but has also addressed service cost and rate design matters. I have also been involved in analyzing affiliate relations, alternative regulatory mechanisms, and regulatory restructuring issues. This experience has involved electric, natural gas transmission and distribution, and telephone utilities, as well as water and wastewater companies.

HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY
PROCEEDINGS ON UTILITY RATES?

Q.

1	A.	Yes. I have previously presented testimony on more than 200 occasions before the
2		Federal Energy Regulatory Commission and the public utility commissions of Arizona,
3		California, Colorado, Delaware, the District of Columbia, Florida, Idaho, Illinois,
4		Indiana, Kentucky, Louisiana, Maine, Maryland, Montana, Nevada, New Jersey, Ohio,
5		Oklahoma, Pennsylvania, Utah, Virginia and West Virginia, as well as before this
6		Commission. I have also filed rate case evidence by affidavit with the Connecticut
7		Department of Public Utility Control.
8	Q.	ON WHOSE BEHALF ARE YOU APPEARING?
9	A.	I am presenting testimony on behalf of the Division of Public Utilities and Carriers (the
10		Division).
11	Q.	HAVE YOU PREVIOUSLY TESTIFIED ON WATER UTILITY ISSUES
12		BEFORE THIS COMMISSION?
13	A.	Yes, I have been asked by the Division to address water utility issues on several
14		occasions. I testified on revenue requirement, cost of service and/or rate design issues in
15		Newport Water Division, Docket No. 2029 and 2985; Providence Water Supply Board,
16		Docket Nos. 2022, 2048, 2304, 2961, and 3163 and 3446; Kent County Water Authority,
17		Docket No. 2098, Woonsocket Water Department, Docket Nos. 2099 and 2904; United
18		Water Rhode Island, Inc., (formerly Wakefield Water Company), Docket Nos. 2006 and
19		2873; and Pawtucket Water Supply Board, Docket Nos. 3193 and 3378.
20	Q.	ARE YOU A MEMBER OF ANY PROFESSIONAL SOCIETIES?
21	A.	Yes. I am a member of the American Water Works Association (AWWA) and the
22		Chesapeake Section of the AWWA. I am currently Vice Chairman of the AWWA's
23		Rates and Charges Committee and serve on the AWWA Water Utility Council's
24		Technical Advisory Group on Economics.

1	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
2	A.	Exeter Associates was retained by the Division to assist it in the evaluation of the rate
3		filing submitted by the City of Newport Utilities Department, Water Division (Newport
4		or the Water Division) on November 28, 2003. This testimony presents my findings and
5		recommendations with regard to the overall revenue increase to which Newport is
6		entitled. In addition, my testimony also addresses cost allocation and rate design issues.
7	Q.	HAVE YOU PREPARED SCHEDULES TO ACCOMPANY YOUR
8		TESTIMONY?
9	A.	Yes. I have prepared Schedules TSC-1 through TSC-16. Schedule TSC-1 provides a
10		summary of revenues and expenses under present and proposed rates. Schedules TSC-2
11		through TSC-16 present my adjustments to Newport's claimed revenues, operating
12		expenses and debt service costs and other supporting information.
13	Q.	WHAT TIME PERIODS HAVE YOU UTILIZED IN MAKING YOUR
14		DETERMINATION OF NEWPORT'S REVENUE REQUIREMENTS?
15	A.	Consistent with Newport's filing, I have utilized a test year ended March 31, 2003 and a
16		rate year ending June 30, 2004 as the basis for determining the Water Division's revenue
17		requirements and the rate increase necessary to recover those requirements.
18	Q.	DO YOU HAVE ANY GENERAL COMMENTS WITH REGARD TO
19		NEWPORT'S CLAIMED RATE YEAR COST OF SERVICE?
20	A.	Yes. With the exception of a few line items, the operating expenses which Newport has
21		included in its claimed rate year cost of service are simply the amounts included in the
22		Water Division's budget for the fiscal year ending June 30, 2004 (FY 2004). As a result
23		the claimed expenses are not directly derived from or linked to the test year expenses in
24		many cases. In reviewing the budgeted rate year expenses, I have identified a significant

1		number of line items where I have questions about the budget estimate. However, most
2		of these line items are relatively minor expenses. In developing my recommendation on
3		behalf of the Division, I have focused on those budgeted costs where the amount of the
4		costs in question are significant.
5	Q.	DID NEWPORT SUBMIT AN INCOME STATEMENT AS PART OF ITS
6		FILING SHOWING REVENUES AT PRESENT RATES, RATE YEAR
7		EXPENSES AND ITS CALCULATED REVENUE DEFICIENCY?
8	A.	No. In its filing, Newport failed to provide an income statement or other summary which
9		compares revenue at present rates to its claimed expenses in order to identify the increase
10		in revenue which it is seeking.
11	Q.	HAVE YOU PREPARED SUCH A COMPARISON?
12	A.	Yes. Schedule TSC-1 presents a comparison of revenues and expenses at present and
13		proposed rates beginning with the Company's filed claim and recognizing the Division's
14		adjustments. As shown in the column "Rate Year Amount per Newport," Newport's
15		filing recognizes revenues at present rates of \$7,729,689 and a total cost of service of
16		\$8,334,351. This schedule indicates that Newport has claimed a revenue deficiency at
17		present rates of \$606,662.
18	Q.	WHAT IS THE AMOUNT OF THE INCREASE IN REVENUES WHICH YOU
19		ARE RECOMMENDING?
20	A.	As shown on Schedule TSC-1, it is my recommendation that Newport not receive any
21		increase in revenues in this proceeding. Although operations and maintenance (O&M)
22		expenses have increased since the Water Division's last rate case, the Water Division did
23		not spend the monies which the Commission provided in rates for debt service and cash
24		capital outlays. As a result, significant balances have built up in the debt service and

capital improvements restricted accounts which can be drawn down over the next severa	al
years to help meet debt service requirements and help pay for capital improvements. As	S
a result, no increase in revenues is required.	

In this regard and as discussed in more detail subsequently in my testimony, my recommendation would have been for a reduction in revenues based on the allowance for funding the debt service and capital spending restricted accounts proposed by the Water Division in its filing. However, rather than reducing rates and revenues now only to have to increase them by even more in the future to meet capital funding or other needs, I have proposed to increase the amount contributed to the restricted capital spending account. I have increased the annual contribution to the restricted capital spending account over the level proposed by Newport by the amount necessary to match existing revenue levels.

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HOW WOULD CHANGES TO YOUR RECOMMENDED ADJUSTMENTS AFFECT YOUR FINDING THAT NEWPORT SHOULD NOT RECEIVE AN INCREASE IN REVENUES IN THIS PROCEEDING?

Α. As shown on Schedule TSC-1, I have proposed that the amount contributed to the capital outlay restricted account be increased by \$462,623 to avoid reducing rates. Therefore any increases in Newport's costs over my recommendations which the Commission determines to be appropriate would not affect the allowable revenue increase until the amount of those adjustments exceeds \$462,623. In other words, any increases in Newport's other costs would simply reduce the excess available to contribute to the restricted account to avoid reducing rates. To the extent that the Commission found additional reductions to Newport's costs beyond those which I have recommended to be

1		appropriate, the effect would be to increase the contribution to the restricted accounts if
2 3		the Commission agrees that rates should not be reduced.
4		Fire Service Revenues
5	Q.	PLEASE EXPLAIN YOUR ADJUSTMENT TO FIRE SERVICE REVENUES.
6	A.	In its filing, Newport calculated the fire service revenues at present rates based on the
7		number of public hydrants and private fire services as of March 30, 2002. This is not
8		consistent with the level of revenues which will be generated from fire protection service
9		during the rate year. Accordingly, I have adjusted fire service revenues at present rates to
10		reflect the number of private fire services as of December 31, 2003, and the number of
11		public hydrants as of January 2004.
12		The calculation of my adjustment is presented on Schedule TSC-3. As shown
13		there, total fire service reviews at present rates are \$765,610 based on private services as
14		of December 31, 2003 and the number of public fire hydrants as of January 2004. This
15		represents an increase of \$21,995 compared to the fire service revenues recognized by the
16		Water Division in its filing.
17	Q.	WHY DID YOU UTILIZE THE NUMBER OF PUBLIC FIRE HYDRANTS AS
18		OF JANUARY 2004?
19	A.	I utilized the number of hydrants in January 2004 rather than at December 31, 2003
20		because Newport officially activated and began billing 16 new hydrants in January when
21		final inspection notifications were received. (This was the first time new hydrants were
22		placed in service since sometime during the 12 months ended June 30, 2002.)
23		Accordingly, the number of hydrants as of January 2004 is more reflective of the ongoing
24 25		levels of service being provided and the revenues which will be generated.

1		Miscellaneous Revenue
2	Q.	WHAT ADJUSTMENTS HAVE YOU MADE TO THE MISCELLANEOUS
3		REVENUE RECOGNIZED BY THE WATER DIVISION?
4	A.	I have made two adjustments to the miscellaneous revenues recognized by Newport in its
5		filing. First, Newport identified projected Customer Service Revenues of \$85,000 for the
6		rate year. However, in totaling the miscellaneous revenues available as an offset to the
7		costs which must be recovered from water and fire service, Newport failed to include
8		these revenues. Accordingly, I have increased miscellaneous revenue by \$85,000 to
9		include Customer Service Revenue.
10		Second, I have adjusted interest income to be consistent with actual experience
11		during the rate year to date. As can be expected, there are variations between actual
12		revenues and the projected revenues based on six months of experience for all of the
13		components of miscellaneous revenue. However, these variations are relatively minor for
14		all of the component accounts with the exception of interest income. Actual interest
15		income for the first six months of the rate year was \$19,002 compared to Newport's total
16		rate year estimate of \$20,000. Based on the actual interest income for six months, I have
17		adjusted rate year interest income to reflect a total of \$38,000.
18	Q.	HAVE YOU PREPARED A SCHEDULE SUMMARIZING THE TOTAL
19		EFFECT OF YOUR ADJUSTMENTS TO MISCELLANEOUS REVENUE?
20	A.	Yes. As shown on Schedule TSC-4, the effect of my adjustments is to increase interest
21		income by \$18,000 and Customer Service Revenue by \$85,000. This results in a total
22 23 24		increase in miscellaneous revenue of \$103,000.

¹ Customer Service Revenues are derived from charges for non-recurring activities such as billing for new meters, tapping fees, seasonal activation and termination of water service, etc.

1		Benefits Expense
2	Q.	PLEASE EXPLAIN WHAT CLAIM NEWPORT MADE FOR EMPLOYEE
3		BENEFITS EXPENSE?
4	A.	Newport based its claims for benefits expense on its FY 2004 budget, in which benefits
5		for current employees and retirees are separate line items. In addition to medical, dental,
6		and life insurance premiums, line item 100-Employee Benefits includes retirement plan
7		contributions and FICA taxes. Newport's budgeted expense for this line item reflects a
8		25.8 percent increase over the last year. For line item 103-Retiree Benefits, Newport
9		reflected a 14.3 percent increase. In addition, there is a separate line item 105 for
10		Workers Compensation costs. The amount included for this line item is based on the
11		Water Fund's share of an estimate provided by the Rhode Island Interlocal Trust (The
12		Trust), which provides worker's compensation insurance.
13	Q.	WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO NEWPORT'S
14		CLAIM?
15	A.	I am proposing to adjust Newport's claim for benefits expense to reflect actual
16		experience during the rate year for both employee and retiree benefits. Because new
17		premium and contribution rates are effective on a fiscal year basis, costs incurred since
18		July 1, 2003 are reflective of the current rates. Accordingly, I have calculated my
19		recommended allowance by annualizing costs for the first seven months of FY 2004. As
20		shown on Schedule TSC-5, annualized costs based on actual experience for July 2003
21		through January 2004 are \$96,178 less than Newport's rate year claim.
22		In calculating my recommended allowance for benefits expenses on Schedule
23		TSC-5, I have recognized that the premium level for worker's compensation insurance
24		turned out to be higher than originally estimated. Newport has indicated in response to
25		Division Data Request Set III, item 2 (DIV 3-2) that it will only be required to pay the

1		original estimate of \$36,400 assigned to it by the City in FY 2004. However, I have
2 3 4		reflected the higher premium to more accurately reflect ongoing costs.
5		Rate Case Expense
6	Q.	PLEASE SUMMARIZE THE WATER DIVISION'S CLAIM FOR RATE CASE
7		EXPENSES?
8	A.	Newport has included \$200,000 in its claimed cost of service for rate case expense. This
9		represents the Water Division's estimate of the costs of its consultants and attorney for
10		this proceeding. Newport is proposing to include the full amount of these estimated costs
11		as an annual expense.
12	Q.	WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO THIS
13		CLAIM?
14	A.	Rather than treating rate case expenses as an annual expense, I am proposing that the
15		costs be normalized over two years. In addition, I am recommending that, consistent
16		with Commission practice, rate case expenses be adjusted at the end of this proceeding to
17		reflect actual costs, including those incurred by the Division.
18		As shown on Schedule TSC-6, I have reduced Newport's claimed cost of service
19		by \$100,000 to reflect recovery of its original estimate of costs over two years. This
20		adjustment should be revised later when the actual costs of this proceeding become
21		known. I would note that Newport's estimate of \$200,000 as its costs of this proceeding
22		seems quite high for a municipal utility and, hopefully, will be sufficient to account for
23 24 25		the Division's costs and other incidental costs, such as transcripts.

1		Regulatory Reporting Expense
2	Q.	PLEASE SUMMARIZE NEWPORT'S CLAIM RELATED TO REGULATORY
3		REPORTING EXPENSE.
4	A.	As part of its budgeted rate year expense claim, Newport included \$20,000 in a new
5		Administration line item No. 282-Regulatory Expense to cover the costs of an annual
6		Consumer Confidence Report and other required regulatory reporting. ² In doing so,
7		Newport has treated these costs as though they are a new obligation which is not reflected
8		elsewhere in its expenses.
9	Q.	DO YOU AGREE WITH NEWPORT'S PROCEDURE FOR RECOGNIZING
10		REGULATORY REPORTING COSTS?
11	A.	No. During the test year, Newport incurred nearly \$22,000 for regulatory reports
12		including its consumer confidence report and two public notices regarding two separate
13		drinking water violations. These costs were all included in Customer Accounts line items
14		225-Support Services and 238-Postage and Delivery. While the Water Division made a
15		net downward adjustment to Postage and Delivery costs in moving from test year to rate
16		year expense levels, no adjustment was made to Support Services expense to remove the
17		costs of these reports. As a result, regulatory reporting costs have been overstated in
18		Newport's rate year expense claim.
19	Q.	HAVE YOU PREPARED A SCHEDULE WHICH DEVELOPS THE
20		ADJUSTMENT NECESSARY TO ELIMINATE THIS OVERSTATEMENT?
21	A.	Yes. My adjustment to eliminate the overstatement of regulatory reporting costs is
22		presented on Schedule TSC-7. As shown there, I first determined the total amount
23		included in the test year for regulatory reporting of \$21,981. To this amount, I added

 $^{^2}$ Newport also included \$85,000 in this line item for a Vulnerability Assessment which is addressed subsequently in my testimony.

\$13,349, which is the net effect of the normalization and rate year adjustments which
Newport made to the line items in which regulatory reporting costs are included in
deriving its claimed rate year expense. Totaling these two figures reveals that \$35,330
was included in Newport's filed claims for regulatory reporting costs. Finally, I
compared this total to the \$20,000 which Newport has identified as the required
allowance for regulatory reporting costs. This results in a downward adjustment of
\$15,330 to rate year expenses to eliminate the overstatement of regulatory reporting
costs.

Q. OTHER THAN INCLUDING \$20,000 IN THE NEW LINE ITEM 282, WHAT
OTHER ADJUSTMENTS DID NEWPORT MAKE TO TEST YEAR
REGULATORY REPORTING COSTS?

Other than including \$20,000 in the new line item 282-Regulatory Expense, the other significant adjustment made by Newport was to reduce Postage and Handling by a net amount of \$6,794. This was done as part of an adjustment to transfer all non-billing related costs from Customer Accounts to Administration. To be conservative, I have treated this entire net reduction as a reduction to regulatory reporting costs. Newport also made a rounding adjustment to increase Support Services by \$143.

In her direct testimony (at page 11), Ms. Forgue identifies line item 430-Capital Studies as being the predecessor for the new line item 282. I have not considered this line item in my adjustment because none of the regulatory reporting costs were included in line item 430-Capital Studies during the test year. This line item, which totaled only \$1,685 during the test year, is more closely associated with studies such as the Vulnerability Assessment which Newport also included in line item 282-Regulatory Expense.

1 2		Electricity Costs
3	Q.	HOW DID NEWPORT DEVELOP THE BUDGETED LEVEL OF
4		ELECTRICITY COSTS FOR FY 2004 THAT IT INCLUDED IN ITS
5		CLAIMED COST OF SERVICE?
6	A.	According to the response to DIV 1-20, Newport relied primarily on the most recent
7		complete fiscal year for which it had data (FY 2002) as the basis for its FY 2004 budget.
8		It then adjusted these amounts to take into consideration expected changes and historical
9		expenditures. That response notes, for example, that electricity costs for the Sakonnet
10		and Paradise Pump Stations (Source of Supply-Mainland) were reduced from FY 2002
11		levels because usage of those stations was above average in 2002. Similarly, Lawton
12		Valley water treatment plant (WTP) electricity costs were increased from FY 2002 levels
13		in anticipation of the proposed Residuals Management Pump Station becoming
14		operational. (As discussed subsequently, this facility is not now scheduled to be in
15		service before the end of 2005.)
16	Q.	HOW DO NEWPORT'S RATE YEAR ELECTRICITY COSTS BASED ON ITS
17		FY 2004 BUDGET COMPARE TO RECENT ACTUAL COSTS?
18	A.	A comparison of Newport's budgeted electricity costs for FY 2004 to those incurred in
19		FY 2003 and in the most recent 12 months reveals that actual costs have been well below
20		Newport's budgeted rate year claim of \$379,000. For FY 2003, actual electricity costs
21		totaled \$318,467 and for the 12 months ended January 2004, total electricity costs were
22		\$305,534.
23	Q.	WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO THE RATE
24		YEAR ALLOWANCE FOR ELECTRICITY EXPENSE?

1	A.	I am proposing to adjust electricity expense to reflect the average annual costs based on
2		the actual costs for the 24 months ended January 2004. ³ As shown on Schedule TSC-8,
3		the average annual costs over this time period were \$309,713. This represents a
4		reduction to Newport's claimed rate year electricity costs based on its FY 2004 budget of
5		\$69,287.
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A.

Chemicals Expense

Q. WHAT HAS NEWPORT INCLUDED IN ITS RATE YEAR COST OF SERVICE FOR CHEMICALS EXPENSE?

- Newport has based its claimed chemicals expense for the rate year on the amounts included in its FY 2004 budget. The total amount of chemicals expense which Newport has requested is \$442,000, including \$220,000 for the Newport WTP, \$200,000 for the Lawton Valley WTP and \$22,000 for Source of Supply-Island. These amounts reflect significant increases over the actual test year expenses, which Newport has attributed to the fact that test year expenses for the 12 months ending March 2003 were not typical of normal fiscal year expenses. (Responses to DIV 1-22 and 3-11.) In addition, Newport included \$20,000 for incremental chemical costs at the Lawton Valley WTP in anticipation of new requirements to be identified in a pending Compliance Evaluation Study.
- Q. WHAT CONCERN DO YOU HAVE WITH REGARD TO NEWPORT'S CLAIMED LEVEL OF CHEMICAL COSTS?
- A. My analysis of Newport's claimed chemical costs indicates that the amounts claimed for the two treatment plants are substantially in excess of the required amounts based on the

³ For Administration electricity costs, I have utilized the 12 months ended December 2003 because of an anomaly in the costs on March 2002 which would be picked up in the 24-month average. The amount recorded in March 2002 was approximately 5 times the monthly cost in any other month from July 2001 through January 2004.

actual chemical usage at these plants. In response to DIV 3-9 and DIV 3-11, Newport
has indicated that actual chemical costs have been and will continue to be higher than the
cost of chemicals used because chemicals must also be purchased for inventory. The
need to purchase chemicals in one year to replenish inventory which was drawn down in
a prior year could cause the cost of chemicals purchased to be up in one year after being
down in a prior year. However, there should be no need to purchase additional chemicals
year after year for inventory. Doing so would result in the build up of unnecessary
inventory.

Q. HAVE YOU PREPARED AN ANALYSIS TO COMPARE CHEMICAL COSTS

BASED ON ACTUAL CHEMICAL USAGE WITH NEWPORT'S CLAIM?

Yes. This analysis is shown on Schedule TSC-9. As indicated there, I have identified the quantities of each type of chemical used at each water treatment plant in FY 2002, FY 2003 and during the 12 months ending (TME) January 2004. For each chemical, I then identified the maximum quantity utilized in any of the three years and multiplied that quantity by the current price to calculate the maximum annual cost. Finally, I added the granulated activated carbon (GAC) cost at the Newport WTP and the \$20,000 estimate for Compliance Evaluation related costs at the Lawton Valley WTP to derive total costs comparable to Newport's claim at each plant. As indicated on Schedule TSC-9, even when the maximum usage quantities in any of the three years are utilized to derive the annual cost, chemical expense for the Newport WTP is still more than \$50,000 less than Newport's claim. Similarly, chemical expense for the Lawton Valley WTP is more than \$43,000 less than Newport's claim.

WHAT ALLOWANCE FOR CHEMICAL COSTS ARE YOU PROPOSING TO INCLUDE IN RATE YEAR EXPENSES?

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2		based on the maximum usage quantities and current prices as shown on Schedule TSC-9.
3		While this is conservative, I have used this procedure recognizing that Newport is
4		required to maintain a restricted account for chemical costs. Accordingly, any
5		differences between actual chemical usage and prices compared to those reflected in my
6		estimate will be accounted for through the restricted fund.
7		I would note that an addition to the amounts shown on Schedule TSC-9, I have
8		accepted Newport's \$22,000 allowance for copper sulfate costs for the Island source of
9		supply reservoirs. This brings the total chemical costs to be contributed to the restricted
10		fund to \$348,012. This is \$93,988 less than Newport's claim. It also represents an
11		increase of \$55,826 over the current level of chemicals funding of \$292,186 approved in
12		Docket No. 2985.
13	Q.	DO YOU HAVE ANY OTHER COMMENTS WITH REGARD TO YOUR
14		PROPOSED ALLOWANCE FOR CHEMICAL COSTS?
15	A.	Yes. As noted previously, I have included Newport's estimate of \$20,000 for additional
16		chemical costs resulting from the Compliance Evaluation Study. The final report from
17		that study was to be completed by the end on February 2004 and costs should be updated
18 19 20		to be consistent with the findings of that final report.
21		Sewer Use Charges
22	Q.	PLEASE EXPLAIN THE ADJUSTMENT THAT YOU HAVE MADE TO
23		NEWPORT'S CLAIMED ALLOWANCE FOR SEWER USER CHARGES.
24	A.	Currently, sludge from the Newport Station 1 WTP is disposed of through discharge to
25		the City of Newport sewer system and the Water Division pays the applicable sewer user
26		charges for this service. In the future, sludge from the Lawton Valley WTP will also

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Direct Testimony of Thomas S. Catlin

I am proposing to set the allowance for chemical costs at the two water treatment plants

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begin to be disposed of in the same manner. In anticipation of this, Newport included an
annual expense allowance of \$104,000 for sewer user charges applicable to the disposal
of sludge from Lawton Valley.

At the present time, the Residuals Management Pump Station necessary to connect the Lawton Valley WTP to the Newport sewer system is still in the design and engineering phase. The disposal of sludge from that WTP to the sewer system is currently not expected to commence until at least the end of 2005. Accordingly, it is premature to include sewer user charges for the disposal of Lawton Valley sludge as a rate year expense. Therefore, I have adjusted Newport's claimed cost of service to remove these charges. As shown on Schedule TSC-10, this adjustment reduces rate year O&M expense by \$104,000.

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Conference and Training

- Q. WHAT CLAIM DID NEWPORT MAKE FOR CONFERENCES AND
- 15 TRAINING EXPENSE?
- 16 A. Newport has included \$12,000 in rate year operating cost for the costs of conferences and training for its employees. This amount is based on its FY 2004 budget for these costs.
- 18 Q. HOW DOES THIS COMPARE TO ACTUAL EXPERIENCE?
- 19 A. In comparison, the actual amount spent for conferences and training was \$3,501 in FY 2002, \$3,208 in FY 2003 and \$1,348 for the first seven months of FY 2004.
- Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO NEWPORT'S
- 22 CLAIMED EXPENSE?
- A. I am proposing to adjust Conferences and Training expense to reflect actual experience based on the average costs incurred in FY 2002 and FY 2003. As shown on Schedule

1		TSC-11, the average amount spent in FY 2002 and FY 2003 was \$3,355. This results in
2 3 4 5		a reduction of \$8,645 to Newport's claimed cost. Telephone & Communications Expense
6	Q.	PLEASE EXPLAIN YOUR ADJUSTMENT TO TELEPHONE AND
7	Ą.	COMMUNICATIONS EXPENSE.
8	A.	According to the response to DIV 1-31, Newport has made changes to its
9		telecommunications service and equipment providers. These new arrangements have
10		resulted in a reduction in costs compared to the arrangements that were reflected in the
11		FY 2004 budget and, thus, included in rate year expenses. Accordingly, I have adjusted
12		the rate year cost of service to reflect the current level of Telephone and Communications
13		Expense. As shown on Schedule TSC-12, this adjustment reduces rate year expenses by
14 15 16		\$6,743.
17		Capital Items Removed from O&M
18	Q.	PLEASE EXPLAIN YOUR ADJUSTMENT TO REMOVE CERTAIN ITEMS
19		FROM O&M EXPENSE AND TO TREAT THEM AS CAPITAL ITEMS.
20	A.	As a part of its budgeted rate year O&M expenses, Newport has included several large
21		expenditures which I am proposing to remove from O&M expense. These include:
222324		 \$50,000 for depth surveys for all of the Island reservoirs included in line item 220 Consultant Fees.
25 26		• \$85,000 for a Vulnerability Assessment, which as noted previously, is included in line item 282 – Regulatory Expense.
27 28 29		• \$58,000 included in Distribution line item 275 – Repair and Maintenance to engage an engineer to plan and specify the scope of work to make repairs to the Reservoir road Tank.

1		I am proposing to treat all of these costs as properly charged to the Capital Outlay
2		restricted account for several reasons. First, all of these studies are more in the nature of
3		capital outlays than O&M expenses. Second, all of the costs are non-recurring or
4		periodic and, therefore, should not be included in the cost of service as recurring annual
5		expenses. Third, the amounts which Newport has included for these items are not known
6		and certain and actual costs could differ significantly from Newport's estimates. Finally,
7		in the case of the Vulnerability Assessment, low cost funding and/or grants may be
8		available to help pay for the costs.
9	Q.	WHAT IS THE EFFECT OF YOUR ADJUSTMENT ON NEWPORT'S
10		CLAIMED COST OF SERVICE?
11	A.	As shown on Schedule TSC-13, the total costs which I am proposing be removed from
12		O&M expense is \$193,000. Because the capital outlay restricted account is currently
13		overfunded, additional restricted fund contributions to pay for these costs are not
14		necessary. Accordingly, the net effect of this adjustment is to reduce Newport's claimed
15		cost of service by \$193,000.
16 17		
18		Payment to City General Fund
19	Q.	PLEASE SUMMARIZE NEWPORT'S REQUEST WITH REGARD TO
20		PAYMENTS TO THE CITY'S GENERAL FUND.
21	A.	The Water Division has requested approval to make payments to the City's General Fund
22		totaling \$2.5 million over the next five years. Newport claims these payments are
23		necessary to compensate the City for the money which the City advanced to cover a
24		shortfall in the Water Fund. The Water Division has stated this deficiency is due to
25		revenue shortfalls and came to light when the monies needed to fund the restricted

1		account balances required by the Commission in its June 2000 Order in Docket No. 2985
2		were fully set aside in December 2002.
3		Newport has proposed to make payments to the City of \$500,000 per year for five
4		years. One half of these payments would be included in the current cost of service as an
5		increased contribution to the debt service restricted fund. The other half of the payments
6		would be obtained by drawing down the balance in the restricted debt service account.
7		Accordingly, the net increase in current revenues which Newport has sought in this
8		proceeding to make these payments is \$250,000.
9	Q.	WHAT CONCERNS DO YOU HAVE WITH NEWPORT'S CLAIM OF A \$2.5
10		MILLION REVENUE DEFICIENCY?
11	A.	I have two significant concerns with regard to Newport's claim. First, Newport has not
12		prepared any analysis of revenues and expenses since June 2000 showing the build-up of
13		the claimed deficiency. As a result, there is no way to evaluate the accuracy of the claim
14		or the causes of the deficiency. Second, if rates were not adequate to meet costs,
15		Newport should have been aware of this long before December 2002 and should have
16		filed for rate relief before 2003. Allowing Newport to recover this claimed deficiency
17		effectively excuses the Water Division and the City for failing to properly monitor and
18		manage the finances and rates of the Water Division.
19	Q.	HAS NEWPORT RAISED ANY OTHER ARGUMENTS WHICH YOU
20		WOULD LIKE TO ADDRESS?
21	A.	Yes. In response to DIV 1-41, the Water Division argues that there would be no
22		deficiency if it was not for the fact that the monies had to be transferred to the restricted
23		debt service and capital outlay accounts even though the monies had not been spent. The

1	response goes on to note that the deficiencies would disappear if the restricted accounts
2	were released.

Of course, this argument ignores the fundamental reason for establishing restricted funds to begin with. That is, Newport and other water utilities have requested significant amounts of revenue to pay for infrastructure replacement costs, capital improvements projects and the debt service associated with bonds issued to finance some projects. To ensure that the monies are available and used for that purpose and that the capital projects are undertaken, restricted accounts have been established.

Q. HOW DID NEWPORT CALCULATE THE AMOUNT WHICH IT SET ASIDE IN ITS RESTRICTED FUNDS?

- A. When Newport identified the need to fund the balances in December 2002, Newport went back and determined what amount should have been set aside beginning July 1, 2000.

 The amount set aside each year was based on the full annual contributions identified by the Commission in its orders in Docket No. 2985.
- Q. DO YOU HAVE ANY COMMENTS WITH REGARD TO THIS CALCULATION?
- 17 A. In examining Newport's claim, one possible issue that I evaluated was whether one cause 18 of the shortfall was that monies were set aside prior to the time the revenues were 19 collected from customers due to billing and collection lag. However, the rates approved 20 by the Commission in Docket No. 2985 went into effect on April 1, 2000. Since 21 Newport did not begin funding the restricted accounts until July 1, 2000, this provided 22 three months for the new rates to be in place and revenues to be collected. Accordingly, I 23 concluded that billing and collection lag did not contribute to the claimed shortfall in 24 revenues.

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1		The other factor I evaluated is how revenues collected by Newport compared to
2		the revenues authorized in Docket No. 2985. This comparison revealed that revenue
3		collected has been less than that approved by the Commission in FY 2001 through FY
4		2003. The fact that Newport collected less revenue than was authorized means that, all
5		else being equal, Newport would not have enough revenue to fund the restricted
6		accounts.
7	Q.	HAVE YOU ANALYZED WHAT PERCENTAGE OF THE REVENUES
8		AUTHORIZED BY THE COMMISSION WERE COLLECTED BY
9		NEWPORT?
10	A.	Yes. As shown on Schedule TSC-14, I have identified the billed revenue per books in
11		each of the fiscal years 2001 through 2003. From these amounts, I have deducted the
12		increase or added the decrease in customer accounts receivable to determine the collected
13		revenue in each year. I have then compared these amounts to the revenues authorized by
14		the Commission in Docket No. 2985 to determine the percentage of authorized revenues
15		collected in each year. As indicated on Schedule TSC-14, these percentages varied from
16		98.56 percent in FY 2001, to 91.38 percent in FY 2002, to 93.74 in FY 2003.
17	Q.	WHAT ARE THE IMPLICATIONS OF RECOGNIZING THAT REVENUES
18		WERE BELOW THE AUTHORIZED LEVEL IN FY 2001 THROUGH FY 2003
19		ON THE AMOUNT OF RESTRICTED ACCOUNT FUNDING?
20	A.	To examine the effects on the restricted accounts, I adjusted the required funding for each
21		of the fiscal years 2001 through 2003 to reflect the percentage of the authorized revenues
22		collected in each year. For example, in FY 2001, the first full year the rates approved in
23		Docket No. 2985 were in effect, revenues were 98.56 percent of the approved levels.
24		Multiplying this percentage by the total restricted account funding requirement results in

available funding of \$4,331,904. This is \$63,310 less than the full requirement. The calculation for each year is shown on Schedule TSC-14. As indicated there, when the contributions to the restricted accounts are adjusted to recognize the percentage of authorized revenues which are collected, the total effect is to reduce the required contributions for the fiscal years 2001 through 2003 by \$717,343.

Q. WHAT IS YOUR RECOMMENDATION?

I do not agree that Newport has demonstrated that the City should be paid the \$2.5 million it has requested. Accordingly, I am proposing to eliminate this repayment from Newport's claimed cost of service. As noted previously, \$250,000 of the annual payment was included in the cost of service and the remaining \$250,000 was treated as being paid by drawing down the balance in the restricted debt service account. Accordingly, this adjustment reduces the cost of service by \$250,000 as shown on Schedule TSC-15.

While I have not accepted the repayment of the \$2.5 million to the City, it would not be unreasonable to adjust the amount which has been placed in the restricted accounts to recognize the percentage by which actual revenues fell below authorized levels in FY 2001 through FY 2003. Accordingly, I am proposing that the \$717,343 calculated on Schedule TSC-14 be released from the restricted accounts and returned to the City for those years. Rather than adjusting each restricted account, I would recommend that the full \$717,343 be taken from the debt service account. This is consistent with Newport's restricted fund projections which utilized the balance in that account as the source of one-half of its \$2.5 million proposed repayment to the City.

1		Restricted Account Contributions
2	Q.	HOW DID NEWPORT ESTABLISH ITS PROPOSED LEVELS OF FUNDING
3		FOR THE CAPITAL OUTLAY AND DEBT SERVICE RESTRICTED
4		ACCOUNTS?
5	A.	Newport established its proposed levels of funding the capital outlay and debt service
6		restricted accounts at a level which would draw down the current excess balances over
7		several years. These balances have built up because the Water Division has not
8		undertaken the capital outlays and issued the debt for which it sought and received
9		approval in Docket No. 2985.
10	Q.	HOW DO THE RESTRICTED ACCOUNT CONTRIBUTIONS PROPOSED BY
11		NEWPORT IN THIS CASE COMPARE TO THOSE APPROVED IN DOCKET
12		NO. 2985.
13	A.	Excluding the \$250,000 which Newport included as a current contribution to be used to
14		make the payment to the City General Fund, Newport has proposed a contribution to the
15		debt service restricted account of \$1,361,853. This compares to the allowance approved
16		in Docket No. 2985 of \$2,701,874. Newport's proposed contribution to the capital outlay
17		restricted account is \$904,167 compared to the \$1,401,154 approved in Docket No. 2985.
18		Overall, Newport's proposed contributions represent a reduction of \$1,837,008 in the
19		amount contributed to these two accounts. This reduction reflects that fact that Newport
20		has not undertaken the capital outlays and issued the debt it identified as necessary
21		approximately four years ago in Docket No. 2985. As a result, both restricted accounts
22		have significant cash surpluses.
23	Q.	WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO THE
24		ANNUAL AMOUNT CONTRIBUTED TO THESE RESTRICTED FUNDS?

The adjustments to Newport's claimed revenues and expenses that I have previously explained eliminate Newport's claimed revenue deficiency and produce a revenue surplus at present rates. However, it is possible that if rates are reduced now, they may have to be increased again in the near future to allow Newport to pay for its infrastructure replacement (IFR) program, its capital improvements program and any debt service on new bonds issued to fund those needs. Therefore, rather than recommending a rate reduction, I am proposing to increase the annual contributions to the restricted accounts by the amount necessary to match costs with revenues at present rates. As shown on Schedule TSC-1, I have calculated the total increase in the annual funding to be \$462,623. I have included the full amount of this increase as a contribution to the capital outlays restricted account.

My recommendation to increase the contribution to the restricted capital outlays account reflects the concern that Newport will need additional funds to meet its capital needs as it undertakes the projects that is has delayed in the past as well as new work that is identified. By increasing the contributions to the restricted capital outlays account, the additional monies will be set aside and will be available to meet future capital needs. Newport is currently in the process of preparing the updated IFR program required by law every five years. Accordingly, the status of the restricted account balance relative to capital needs can be reevaluated in Newport's next rate case.

1		Restricted Account Analysis
2	Q.	HAVE YOU PREPARED AN ANALYSIS OF THE DEBT SERVICE AND
3		CAPITAL OUTLAYS RESTRICTED ACCOUNTS WHICH REFLECT THE
4		CHANGES YOU HAVE PROPOSED?
5	A.	Yes. Schedule TSC-16 presents an analysis of both of the debt service and capital
6		outlays restricted accounts for FY 2004 through FY 2008. In preparing this analysis, I
7		started with account balances and cash flows presented by Newport witness Harold J.
8		Smith on Schedule RFC 12. I then included the changes which I have recommended in
9		my testimony. These include.
10 11 12		 Charging the costs of depth surveys, Vulnerability Assessment and Reservoir Road Tank Repairs to the capital outlays account.
13 14 15		 Releasing \$717,343 from the debt service account to recognize reduced funding requirements for FY 2001 through FY 2003 based on revenues collected versus authorized.
16 17		• Eliminating the \$250,000 funding contribution from rates and \$500,000 per year payment to the City General Fund from the debt service account.
18 19 20		 Increasing the annual funding contribution to the capital outlays account by \$462,623, which is the amount necessary to match expenses with revenues at present rates.
21		As shown on Schedule TSC-16, the projected balance in the debt service
22		restricted account after reflecting the above changes is \$523,394 at the end of FY 2008.
23		This compares to Newport's projected balance of \$1,411. For the capital outlays account
24		the projected balance in FY 2008 with the changes I have recommended is \$2,205,919.
25		This compares to Newport's projected balance in FY 2008 of \$24,661.
26		

1		<u>Cost Allocation</u>
2	Q.	PLEASE PROVIDE AN OVERVIEW OF THE COST ALLOCATION STUDY
3		SUBMITTED BY NEWPORT IN THIS PROCEEDING.
4	A.	Newport has submitted a detailed class cost of service study prepared utilizing the base-
5		extra capacity method set forth in the AWWA's Manual M1, the fifth edition of which is
6		entitled "Principles of Water Rates, Fees, and Charges." This manual is commonly
7		referred to as the AWWA Water Rates Manual. In its study, Newport has first assigned
8		costs to functions which include: Supply & Treatment; Transmission; Distribution;
9		Meters & Services; Customer Costs; and Fire Protection. These costs were then
10		classified as base, extra capacity, customer or fire service related and, in turn, allocated to
11		customer classes which include: residential; commercial; governmental; Navy;
12		Portsmouth Water and Fire District (PWFD); public fire service; and private fire service.
13	Q.	WHAT IS YOUR RECOMMENDATION WITH REGARD TO THIS STUDY?
14	A.	The base-extra capacity method is the most widely utilized cost allocation methodology
15		and it has been accepted for other Rhode Island water utilities. Therefore, I believe it is
16		reasonable for Newport to utilize this methodology. However, I have identified a number
17		of changes which should be made to the specific cost functionalization and allocation
18		procedures which were utilized in Newport's study.
19	Q.	WHAT CHANGES ARE YOU PROPOSING TO MAKE TO THE
20		PROCEDURES WHICH WERE USED IN NEWPORT'S STUDY TO ASSIGN
21		COSTS TO COST FUNCTIONS?
22	A.	I am proposing several changes to the procedures used to assign costs to functional
23		categories in Newport's study. First, consistent with my adjustment to recognize
24		Customer Services Revenue as a source of income, these revenues should be assigned as

an offset to Meter & Services and Customer Costs in proportion to the overall costs assigned to each function.

Second, the breakdown of the footage of mains used to allocate most Transmission and Distribution maintenance and investment costs should be corrected to include all mains 16 inches and larger in diameter as transmission. In Newport's study, mains 20 inches and larger in diameter were inadvertently classified as Distribution. In response to DIV 2-4, Newport has agreed this correction is appropriate.

Third, the investment allocator used to assign debt service related costs to cost functions should be revised to include the net investment in Supply Mains, which Newport failed to include in its final allocator. The response to DIV 2-6 indicates that Newport agrees with this change.

Fourth, Newport developed its investment allocator using net plant investment as of June 30, 2001. While such data may not be available in this proceeding, current net investment data should be used. Moreover, when significant new investments are being added for which the capital outlays and debt service are being recovered in rates, consideration should be given to adjusting the net investment to recognize the new additions. This is especially important if the new investments alter the mix of net investment per books.

Fifth, all capital costs, including debt service, capital improvements and IFR costs should be allocated on the basis of net investment. In its study, Newport allocated: debt service on the basis of net investment; cash outlays for capital improvements on the basis of the specific nature of each capital outlay; and cash outlays for IFR projects on the basis of a composite IFR allocator that reflects the individual IFR projects in the rate year.

The allocation of all capital costs on the basis of net investment is necessary to
maintain consistency from case to case and to avoid fluctuations in rates. The decision
regarding which projects to finance with debt and which to fund as a cash outlay is
largely discretionary. Altering which projects are designated as being financed with debt
and which are financed with cash could significantly alter cost responsibility. Similarly,
the nature of the projects to be undertaken can vary from case to case. For example, if
the projects to be funded with cash are primarily source of supply and treatment in one
case and transmission and distribution in the next rate case, this could result in significant
changes in cost allocations and rates from case to case. By allocating all capital costs on
the basis of investment, these costs are allocated in a fair and consistent manner and
fluctuations in cost responsibility are avoided.
DO VOU HAVE COMMENTS WITH DECARD TO THE INVESTMENT

Q. DO YOU HAVE COMMENTS WITH REGARD TO THE INVESTMENT ALLOCATOR USED TO ALLOCATE IFR COSTS?

Yes. The Commission has previously found in a number of cases that IFR costs should not be allocated to fire protection or meter and service related costs because IFR costs are to be collected through commodity charges. Consistent with these prior decisions, fire service investment should be excluded from the calculation of the IFR allocator. In addition, Meter and Service related IFR costs should not be allocated to Newport's wholesale customer, PWFD. Therefore, rather then simply excluding Meter and Service related investment, this investment should be reassigned to the Transmission and Distribution functions on the basis of the investment in those two categories in developing the net investment allocator for IFR costs.

WHAT CONCERN DO YOU HAVE WITH THE PROCEDURES USED TO ALLOCATE COSTS TO CUSTOMER CLASSES?

Q.

1	A.	My primary concern pertains to the development of the peak day demand factors used to
2		allocate extra-capacity related costs to customer classes. To develop those factors,
3		Newport utilized a method explained in the AWWA Water Rates Manual which relies on
4		having the average daily flow in the month in which each class has its maximum
5		consumption. However, the vast majority of Newport's residential customers are billed
6		on a tertiary (every 4 months) basis. Accordingly, Newport did not have maximum
7		month data for the residential class and assumed that the maximum month consumption
8		was equal to the average in the maximum four-month period. As a result, I believe that it
9		is likely that the peak day demand of the residential class is understated relative to the
10		other classes.

Q. WHAT IS YOUR RECOMMENDATION AS HOW TO RECALCULATE THE PEAK DAY DEMANDS?

Absent the availability of peak monthly demand data for all classes, one solution would be to calculate the peak demands for all classes on a consistent basis. That is, the peak day demand factor for all customer classes could be derived starting with the average daily demand of each class in the same four-month period (July-October) as was used for the residential class. However, I am not proposing that this be done because doing so will not significantly affect rates.

Q. PLEASE EXPLAIN.

A.

A.

Because of the nature of the Newport system and the manner in which costs have been classified, no maximum day extra capacity costs have been assigned to PWFD and very few have been assigned to the Navy. The primary costs allocated using the base and extra-capacity maximum day factors are distribution costs which are only allocated to retail customers. Moreover, Newport has proposed to implement a single commodity rate

1		for all retail customers because cost based rates would not differ significantly between
2		classes and because Newport cannot draw a clear distinction between the residential and
3		commercial customer classes. As discussed subsequently, I am accepting Newport's
4		proposal to establish a single retail commodity rate. Therefore, I am not proposing that
5		Newport recalculate demand factors in this proceeding.
6	Q.	DO YOU HAVE ANY OTHER CONCERNS ABOUT THE ALLOCATION OF
7		COSTS TO CUSTOMER CLASSES?
8	A.	Yes. In its study, Newport did not allocate any Meter & Services or Customer Costs to
9		fire service. In response to DIV 4-1, Newport indicated that this is because most of its
10		Customer Services costs (80 percent) are related to meter maintenance and meter reading
11		Because fire service accounts are only billed annually and are not metered, Newport
12		argues that the amount of billing costs would be negligible.
13		Despite these arguments, I am recommending that a portion of Meter & Services
14		and Customer Costs be allocated to fire service based on the number of fire service bills
15		relative to the actual number of water service bills. Although the overall amount of costs
16		allocated to fire service may not be significant, the cost of billing fire services customers
17		should be included as part of their rates. Recognizing 20 percent of total costs included
18		in the Base (or Customer) Charge from Newport's Study as billing related indicates that
19		the average cost for bill is over \$3.00. ⁴
20	Q.	HAVE YOU PREPARED A REVISED COST ALLOCATION STUDY WHICH
21		REFLECTS THE CHANGES THAT YOU HAVE PROPOSED TO

⁴ A significant portion of the Meters & Services costs included as part of the base charge are service line related and would be applicable to fire services. Hence, use of 20 percent of the overall costs is conservative.

NEWPORT'S CLASSIFICATION AND ALLOCATION OF COSTS AS WELL

	AS YOU	R ADJUST	MENTS T	O NEWPORT'	'S CLAI	MED	REVEN	UE
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No. Due to the structure and complicated manner in which Newport's cost allocation model was developed, it was not possible for me to rerun the model with my recommended changes without devoting substantial time and effort. In light of my recommendation that Newport receive no rate increase, it was concluded that it would not be an efficient use of Division resources to devote that time and effort, the costs of which would ultimately borne by Newport's ratepayers.

Q.

Α.

A.

Rate Design

PLEASE EXPLAIN YOUR RATE DESIGN RECOMMENDATIONS.

Based on my recommendation that Newport not receive a revenue increase in this proceeding, I am recommending that the Water Division's existing rates remain unchanged, with the exception of the commodity rates for retail water service. Although, as explained previously, I have not prepared a revised study, it would not appear that any of the existing rates depart significantly from cost. In addition, Newport did not propose any change in fire protection rates other than to add new rates for 5/8-inch and 2-inch fire services.

With regard to retail commodity rates, Newport has been transitioning toward uniform rates and the Water Division was directed to file flat retail commodity rates in Docket No. 2985. As noted previously, commodity costs do not differ significantly by customer class and Newport cannot readily distinguish customer classes. Accordingly, establishing a single commodity rate applicable to all retail consumption is appropriate. Based on Newport's projected rate year retail consumption revenues at present rates of

1		\$4,713, 347 and sales of 1,392,619.5 thousand gallons, the uniform retail commodity rate
2		would be \$3.38 per thousand gallons.
3	Q.	DO YOU HAVE ANY COMMENTS REGARDING NEWPORT'S PROPOSED
4		METHOD OF CALCULATING THE CUSTOMER OR BASE CHARGE FOR
5		RETAIL SERVICE?
6	A.	Yes. Currently, the customer charge or base charge for retail water service is \$11.00 per
7		bill, independent of whether the customer is billed monthly or three times per year.
8		Newport has proposed that this customer charge be calculated so that a customer which is
9		billed three times a year will be charged a rate four times the rate applicable to monthly
10		customers. By doing so, Newport is proposing that all customers pay the same amount
11		per year regardless of the frequency of billing.
12		The majority of the costs included in the customer charge are associated with
13		meter reading and billing and these costs vary directly with the frequency of billing. In
14		addition, those costs which do not vary with billing frequency, meter and service
15		maintenance costs, vary with meter and service size. Although, Newport does not track
16		meter and service diameter for billing purposes, it is logical that the commercial
17		customers who are primarily billed monthly have larger meters and services on average
18		than residential customers who are primarily billed three times a year. Therefore, I am
19		recommending that customer charge remain the same per bill, independent of the
20		frequency of billing.
21	Q.	IS THERE ANY OTHER RATE DESIGN PROPOSAL WHICH YOU WOULD
22		LIKE TO ADDRESS?
23	A.	Yes. Newport has proposed to establish tariff rates for 5/8-inch and 2-inch diameter
24		private fire services in order to have rates on file should the demand for such service

1	arise. I agree that this is appropriate and would recommend that a rate for 3/4 and 1-inch
2	fire service lines also be established.
3	Newport proposed a rate of \$32.04 per year for 2-inch fire services. This is

Newport proposed a rate of \$32.04 per year for 2-inch fire services. This is consistent with the existing rate for 6-inch fire services and the relative demand ratios for the two-service sizes. Accordingly, I believe this rate is acceptable, but would propose that it be rounded to \$32.00 per year.

Newport calculated a rate of \$5.28 per year for a 5/8-inch fire line based on a demand ratio of 1.0. Given that the demand ratio for a one-inch service line is 1.0, I would recommend that the same rate apply to fire services up to one-inch. Since billing costs were not included, and in order to avoid a fire service rate less than the retail customer charge, I would recommend that a rate of no less than \$11.00 per year be established for one-inch and smaller fire services.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

14 A. Yes, it does.

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BEFORE THE

PUBLIC UTILITIES COMMISSION

OF RHODE ISLAND

CITY OF NEWPORT)	
UTILITIES DEPARTMENT,)	DOCKET NO. 3578
WATER DIVISION)	

SCHEDULES ACCOMPANYING THE

DIRECT TESTIMONY

OF

THOMAS S. CATLIN

ON BEHALF OF THE DIVISION OF PUBLIC UTILITIES AND CARRIERS

MARCH 2004

EXETER

ASSOCIATES, INC. 5565 Sterrett Place Suite 310 Columbia, Maryland 20904

Summary of Revenues and Expenses at Present and Proposed Rates Rate Year Ended June 30, 2004

	Rate Year mount Per Newport	Division djustments	Rate Year at Present Rates	Re	owable evenue crease	Rate Year t Proposed Rates
Revenue						
Customer Charge	\$ 556,555	\$ -	\$ 556,555			\$ 556,555
Retail Consumption	4,713,347	-	4,713,347			4,713,347
Wholesale/Bulk Sales	1,553,072	-	1,553,072			1,553,072
Fire Protection	743,615	21,995	765,610			765,610
Miscellaneous	 161,100	103,000	264,100			 264,100
Total Revenue	\$ 7,727,689	\$ 124,995	\$ 7,852,684	\$	-	\$ 7,852,684
Expenses						
Water Administration	1,344,098	(207,861)	1,136,237		-	1,136,237
Customer Accounts	486,645	(19,652)	466,993		-	466,993
Source of Supply-Island	448,015	(70,495)	377,520		-	377,520
Source of Supply-Mainland	79,500	(14,544)	64,956		-	64,956
Treatment & Pumping-Newport Plant	1,214,365	(86,844)	1,127,521		-	1,127,521
Treatment & Pumping-Lawton Valley	1,097,580	(202,550)	895,030		-	895,030
Water Laboratory	199,347	(2,032)	197,315		-	197,315
Transmission & Distribution Maintenance	811,613	(83,193)	728,420		-	728,420
Fire Protection	14,000	-	14,000		-	14,000
Subtotal	\$ 5,695,163	\$ (687,172)	\$ 5,007,991	\$	-	\$ 5,007,991
Payment to City General Fund	250,000	\$ (250,000)	-		-	-
Debt Service	1,361,853		1,361,853		-	1,361,853
Capital Outlays	 904,167	 462,623	 1,366,790		-	 1,366,790
Total Expenses	\$ 8,211,183	\$ (474,549)	\$ 7,736,634	\$	-	\$ 7,736,634
Operating Reserve	 123,168	 (7,118)	 116,050		-	 116,050
Total Cost of Service	\$ 8,334,351	\$ (481,667)	\$ 7,852,684	\$	-	\$ 7,852,684
Revenue Surplus/(Deficiency)	(\$606,662)	\$606,662	\$0	\$	-	\$0

Summary of Division Adjustments to Rate Year Revenues and Expenses at Present Rates Rate Year Ending December 31, 2004

Description	Amount	Source
Fire Service Revenue Miscellaneous Charges Total Revenue Adjustments	21,995 103,000 124,995	Schedule TSC-3 Schedule TSC-4
Benefits Expense Rate Case Expense Regulatory Reporting Expense Electricity Chemical Costs Sewer Charges Conferences & Training Expense Telephone & Communications Costs to be Charged to Restricted Fund Payment to City Capital Outlay Restricted Funding Operating Reserve	(96,178) (100,000) (15,330) (69,287) (93,989) (104,000) (8,645) (6,743) (193,000) (250,000) 462,623 (7,118)	Schedule TSC-5 Schedule TSC-6 Schedule TSC-7 Schedule TSC-8 Schedule TSC-9 Schedule TSC10 Schedule TSC-11 Schedule TSC-12 Schedule TSC-13 Schedule TSC-15 Schedule TSC-1 See Note (1)
Total Expense Adjustments	\$ (481,667)	
Total Adjustment to Revenue Deficiency	(606,662)	

Note:

(1) Based on 1.5% of total expenses as reflected on Schedule TSC-1.

Adjustment to Fire Service Revenues to Reflect Increase in Numbers of Services and Hydrants Rate Year Ending June 30, 2004

			Annual Revenue
Private Fire Services			
5/8-Inch	-	\$ -	\$ -
2-Inch	-	-	-
4-Inch	43	285	12,255
6-Inch	229	570	130,530
8-Inch	58	1,305	75,690
10-Inch	1	2,155	2,155
12-Inch	1	3,460	3,460
Total	332		\$ 224,090
Public Fire Hydrants	967	560	541,520
Total Fire Service Revenue			\$ 765,610
Amount Per Newport (2)			743,615
Adjustment to Revenue			\$ 21,995

- (1) Number of Private Fire Services as of December 31, 2003 and number of Public Fire Hydrants as of January 2004 per response to DIV 3-14.
- (2) Rate year revenue per Schedule RFC-6.

Adjuistment to Miscellaneous Revenue Rate Year Ending June 30, 2004

Investment Interest Income	
Estimate Based on Actuals through 12/31/03 (1)	\$ 38,000
Amount per Filing (2)	20,000
Increase	\$ 18,000
Customer Services Revenue Estimated Revenue (2) Amount per Filing (3)	\$ 85,000 -
Increase	\$ 85,000
Total Increase in Miscellaneous Revenue	\$ 103,000

- (1) Reflects \$19,002 of interest income through 12/31/03 per response to DIV 2-3.
- (2) Per Schedule RFC-2
- (3) Per response to DIV 2-1, amount was inappropriately not recognized as a revenue offset in Newport's filing.

Adjustment to Budgeted Benefits Expense To Reflect Actual Costs Incurred Rate Year Ending June 30, 2004

	Benefits Expense per			Annualized Based on		
	Filing (1)		Actuals (2)		Ad	ljustment
Administration	\$	46,475	\$	41,930	\$	(4,545)
Administration-Retiree		153,758		140,415		(13,343)
Administration-Workers' Compensation (3)		36,400		39,377		2,977
Customer Service		108,472		104,150		(4,322)
Supply-Island		87,681		76,788		(10,893)
Supply-Mainland		2,000		173		(1,827)
Treatment-Newport		160,228		148,740		(11,488)
Treatment-Lawton Valley		159,353		132,430		(26,923)
Laboratory		37,739		35,707		(2,032)
Transmission & Distribution	#	145,099		121,317		(23,782)
Total Amount	\$	937,205	\$	841,027	\$	(96,178)

- (1) Per Schedule RFC 1-A.
- (2) Per response to DIV 3-15. Reflects costs for first 7 months of rate year annualized.
- (3) Per response to DIV 3-2.

Adjustment to Rate Case Expense Rate Year Ending June 30, 2004

	 Total
Rate Case Expense per Filing (1)	\$ 200,000
Amortization Period	 2 Years
Annual Expense Allowance per Division (1)	\$ 100,000
Annual Expense for Filing	\$ 200,000
Adjustment to Expense	\$ (100,000)

Note:

(1) Per response to DIV 1-16.

Adjustment to Regulatory Reporting Expense Rate Year Ending June 30, 2004

	Aı	mount
Regulatory Reporting Costs per books		
Consumer Confidence Report (1)	\$	5,370
Turbidity Notice (2)		9,839
TOC Notice (2)		6,772
Total Test Year Expense	\$	21,981
Normalization and Rate Year Adjustments (3)		
Postage		(6,794)
Support Services		143
Regulatory Reporting		20,000
Total Adjustments	\$	13,349
Adjusted Expense included in Rate Year	\$	35,330
Required Annual Amount (4)		20,000
Adjustment to Rate Year Expense	\$	(15,330)

- (1) Per response to DIV 1-18.
- (2) Per response to DIV 3-7.
- (3) Adjusments reflected on Schedule RFC 1-A. Amount for postage reflects decrease in expense in Customer Accounts net of increase in Admistration for line item 238.
- (4) Per testimony of Julia Forgue.

Adjustment to Budgeted Electricity Expense To Reflect Actual Expense Rate Year Ending June 30, 2004

	Budgeted Expense per Filing (1)	Annual Based on Last 24 Months (2)	Adjustment
Administration	\$ 4,000	\$ 3,905	\$ (95)
Supply-Island	16,000	6,398	(9,602)
Supply-Mainland	50,000	37,283	(12,717)
Treatment-Newport	185,000	162,115	(22,885)
Treatment-Lawton Valley	115,000	89,566	(25,434)
Transmission & Distribution	#9,000	10,446	1,446
Total Amount	\$ 379,000	\$ 309,713	\$ (69,287)

- (1) Per Schedule RFC 1-A.
- (2) Per responses to DIV 1-20 and 3-8. Amounts based on costs for 24 months ended January 2004 except Administration amount is for 2 months ended January 2004 due to anomoly in cost for March 2002.

Analysis of Average Annual Chemical Costs at the Newport and Lawton Valley Water Treatment Plants Rate Year Ended June 30, 2004

Chemical Newport Water Treatment Pla	FY 2002 Usage in Pounds (1)	FY 2003 Usage in Pounds (2)	TME 1/04 Usage in Pounds (3)	Maximum Annual Usage (4)	Current Cost Per Pound (5)	Annual Cost (6)
					A a t a a	
Alum	311,999	328,912	340,433	340,433	\$ 0.1079	36,724
Lime	184,043	166,541	179,408	184,043	0.0644	11,852
Chlorine Flouride	56,750 45,201	51,880	49,040	56,750	0.2450	13,904
Sodium Chlorite	15,291 77,556	13,843	17,894 77,982	17,894 93,334	0.3000 0.5270	5,368
Polymer	1,000	93,334 1,300	1,250	93,33 4 1,300	4.8700	49,187 6,331
Subtotal	1,000	1,300	1,230	1,300	4.6700	\$123,367
Subtotal						ψ 123,307
Granular Activated Carbon						45,830
Annual Cost Based on Maxim	um Usage					\$169,197
Amount per Newport Filing (2)						\$220,000
Adjustment to Chemicals Exp	ense					\$ (50,803)
Lawton Valley Water Treatme	nt Plant					
Alum	476,483	498,285	400,042	498,285	\$ 0.1079	53,752
Lime	233,900	235,000	197,050	235,000	0.0785	18,445
Chlorine	39,640	37,027	33,304	39,640	0.2450	9,712
Flouride	15,526	12,766	15,954	15,954	0.3000	4,786
Sodium Chlorite	95,103	80,219	71,277	95,103	0.5270	50,119
Annual Cost Based on Maxim	um Usage					\$136,815
Allowance for Additional Needs	from Complia	ance Evaluatio	on Study			20,000
Adjusted Annual Costs						\$ 156,815
Amount per Newport Filing (2)						\$200,000
Adjustment to Chemicals Exp	ense					\$ (43,185)

- (1) All quantities and prices are per the response to DIV 3-9.
- (2) Per Schedule RFC 1-A.

Adjustment to Newport Sewer Charges Rate Year Ending June 30, 2004

	Total
Lawton Valley Sewer Charges per Filing (1)	\$ 104,000
Rate Year Amount per Division (2)	
Adjustment to Expense	\$(104,000)

- (1) Per Schedule RFC 1-A.
- (2) Recognizes that Lawton Valley is not anticipated to begin discharging waste to Newport sewer system before December 2005.

Adjustment to Reflect Average Conferences & Training Expense Rate Year Ending June 30, 2004

		Amount per Filing (1)		FY 2002 and 2003 Average (2)		justment
Administration	\$	2,000	\$	888	\$	(1,112)
Treatment-Newport		2,500		833		(1,668)
Treatment-Lawton Valley		3,500		492		(3,009)
Transmission & Distribution	#	4,000		1,143		(2,857)
Total Amount	\$	12,000	\$	3,355	\$	(8,645)

- (1) Per Schedule RFC 1-A.
- (2) Per response to DIV 1-26.

Adjustment to Telephone & Communications Expense Rate Year Ending June 30, 2004

Telephone & Communications Expense per Filing (1)	\$ 15,000
Annualized Expense based on Current Services (2)	\$ 8,257
Adjustment to Rate Year Cost of Service	\$ (6,743)

- (1) Per Schedule RFC 1-A.
- (2) Per response to DIV 1-31.

Adjustment to O&M Expense to Remove Capital Items Rate Year Ending June 30, 2004

<u>Description</u>		Amount		
Depth Surveys Vulnerability Assessment Reservoir Road Tank Repairs	\$	50,000 85,000 58,000		
Total to be Paid from Restricted Fund	\$	193,000		
Amount to be Included as O&M	\$			
Adjustment to Rate Year O&M Expense	\$	(193,000)		

- (1) Per response to DIV 1-15.
- (2) Per response to DIV 1-17.
- (3) Per response to DIV 1-27.

Analysis of Revenues and Restricted Account Funding for FY 2001-FY 2003 Rate Year Ending June 30, 2004

	FY 2001	FY2002	FY 2003
Billed Revenue Per Books (1) Change in Customer Acounts Receivable (1) Collected Revenue	\$ 7,644,448 96,649 \$ 7,547,799	\$6,928,286 (69,951) \$6,998,237	\$7,464,619 286,211 \$7,178,408
Authorized Revenue In Docket No. 2985	\$ 7,658,108	\$7,658,108	\$7,658,108
Percent of Authorized Revenues Collected	98.56%	91.38%	93.74%
Restricted Funding Requirement (2)	\$ 4,395,214	\$4,395,214	\$4,395,214
Amount Available Based on Percent Collected	4,331,904	4,016,495	4,119,900
Difference Between Requirement and Available	\$ (63,310)	\$ (378,719)	\$ (275,314)
Total Difference FY 2001-FY2003			\$ (717,343)

- (1) Per Annual Reports to the Commission.
- (2) Based on following amounts from Docket No. 2985:

Chemicals	\$ 292,186
Debt Service	2,701,874
Capital Outlays	 1,401,154
Total	\$ 4.395.214

Adjustment to Eliminate Repayment to City Rate Year Ending June 30, 2004

	 Total
Repayment Included as Current Expense (1)	\$ 250,000
Rate Year Amount per Division	
Adjustment to Expense	\$ (250,000)

Note:

(1) Per Schedule RFC 12.

Analysis of Restricted Account Balances for FY 2004-FY 2008 Based on Proposed Funding and Current Cost Estimates Rate Year Ending June 30, 2004

	Fiscal Year Ending June 30								
	2004		2005		2006		2007		2008
Debt Service Account									
Beginning Cash Balance	\$1,975,973	\$	927,111	\$	750,075	\$	618,728	\$	542,685
Additions									
Debt Service Funding Contribution	\$1,361,853	\$	1,361,853	\$	1,361,853	\$	1,361,853	\$	1,361,853
Interest Income	30,141		29,031		16,772		13,688		11,614
Total Additions	\$1,391,994	\$	1,390,884	\$	1,378,625	\$	1,375,541	\$	1,373,467
<u>Deductions</u>									
Existing Debt Service	1,723,513		1,290,002		1,232,054		1,173,667		1,114,840
SRF Loan Principal	-		133,093		133,093		133,093		133,093
SRF Loan Interest	-		144,825		144,825		144,825		144,825
Return Excess Contributions FY 2001-2003	717,343		-		-		-		-
Total Deductions	2,440,856		1,567,920		1,509,972		1,451,585		1,392,758
Ending Cash Balance	\$ 927,111	\$	750,075	\$	618,728	\$	542,685	\$	523,394
Capital Spending Account									
Beginning Cash Balance	\$ 2,473,692	\$	1,531,230	\$	1,265,655	\$	1,210,414	\$	1,705,965
Beginning Cash Balance	\$ 2,47 3,092	φ	1,001,200	φ	1,205,055	φ	1,210,414	φ	1,705,905
Additions	^	•				•		•	
Capital Outlays Funding Contribution	\$1,366,790	\$	1,366,790	\$	1,366,790	\$	1,366,790	\$	1,366,790
Interest income	41,333	_	40,049	_	27,969	_	24,761	_	29,164
Total Additions	\$1,408,123	\$	1,406,840	\$	1,394,759	\$	1,391,551	\$	1,395,954
<u>Deductions</u>									
Captital Outlays per Newport Filing	2,157,586		1,672,414		1,450,000		896,000		896,000
Capital Items Removed from O&M	193,000		-		-		-		-
Total Deductions	2,350,586		1,672,414		1,450,000		896,000		896,000
Ending Cash Balance	\$1,531,230	\$	1,265,655	\$	1,210,414	\$	1,705,965	\$	2,205,919